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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/997,334	11/30/2001	Masahiro Sato	NGB-106-A	4987

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EXAMINER
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CULBRETH, ERIC D

ART UNIT	PAPER NUMBER
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3616

DATE MAILED: 02/16/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

09/997,334

Applicant(s)

SATO ET AL.

Examiner

Eric D Culbreth

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 07 December 2004.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-3,5-9 and 12-23 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-3,5-9 and 12-23 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_

**DETAILED ACTION**

***Priority***

1. Applicant cannot rely upon the foreign priority papers to overcome this rejection because a translation of said papers has not been made of record in accordance with 37 CFR 1.55. See MPEP § 201.15.

***Claim Rejections - 35 USC § 112***

2. Claims 1-3, 5-9 and 12-23 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

In claims 1 and 3, “narrow” throated gas passageway is indefinite (narrow compared to what; when is this limitation infringed).

In claims 1, 3 and 17 “appropriate” flow rate is indefinite (again, appropriate for what and how; when is this limitation infringed).

***Claim Rejections - 35 USC § 102***

3. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

4. Claims 1-3, 7 and 16-18 as best understood are rejected under 35 U.S.C. 102(b) as being anticipated by Shiota et al (US005427410A, of record).

Shiota et al discloses an air bag housed and folded in an instrument panel (column 1, lines 15-25) and inflated by inflator 16 when the vehicle collides (column 1, lines 15-25). The air bag comprises a single opening portion at one end (the left end in Figure 2) into which gas generated by the inflator flows and a gas flow path portion extending continuously from the opening portion (in Figure 2, the portion of the bag 10 extending from where the bag is attached to the container 12 to the right side of cloth 108). An occupant restraint portion is at an opposite (right side in Figure 2) closed end of the bag (the portion of the bag to the right of cloth 108 in Figure 2) and has a single continuous open space when inflated. The occupant restraint portion is spaced from the opening portion where the bag is attached to the housing 12 extends continuously from the gas flow path portion. The gas flow path portion is a narrow throated passageway between the opening portion and occupant restraint portion (i.e., as indefinitely recited, it is narrower than the occupant restraint portion, as the bag tapers toward the right side where the occupant restraint portion is) whereby gas flows from the opening portion to the occupant restraint portion through the gas flow path portion. Cloth 108 is a flow-restricting penetrating portion disposed adjacent to (near, next to) the opening portion and which constricts and regulates the gas flowing into the airbag as functionally recited. Also, as functionally and indefinitely recited at the end of claim 1, the cloth 108 is selected of a size to achieve an “appropriate” flow rate of the gas from the inflator into the airbag based on the size of the airbag (i.e., appropriate to inflate the airbag in time to be effective).

Regarding claim 2, as seen in Figure 2 Shiota et al’s penetrating portion 108 divides the gas flow path into two or more paths (an upper and lower path in Figure 2).

As broadly recited in claim 3 Shiota et al's cloth 108 is also a "joint portion" in that it is a portion joined by sewing to the sidewalls 104, 105 of the airbag 10.

In regard to claims 7 and 13, as functionally recited, penetrating portion or joint portion 108 reduces an opening area of the gas flow path portion.

Regarding claims 16-17, Shiota et al teaches the penetrating portion being sealed (note Shiota et al, column 3, lines 1-4, where the ends of the cloth 108 are both seamed to openings 106, 107 in side panels 104, 105, and also note column 4, lines 15-21, where Shiota et al teaches that vent holes 24, 24a may be disposed some other place than facing cavities 20, 20a and hence some other place than on penetrating portion 108, leaving the penetrating portion sealed).

The penetrating portion 108 extends through the gas flow path portion so as to reduce the volume thereof and adjust the rate at which the gas can flow through inasmuch as applicant's invention (i.e., compared to if it weren't there at all; that applicant intends to use different sized penetrating portions to adjust flow is claimed in a patentably distinguishing manner from Shiota et al) (claim 18).

5. Claims 3 and 12-15 as best understood are rejected under 35 U.S.C. 102(b) as being anticipated by Maruyama (US005593179A, of record).

Maruyama discloses an air bag in a folded state housed in an instrument panel inflated by inflator 16 when the vehicle collides (column 1, lines 15-25), the air bag having a single opening portion attached to container 12 at one end and a gas flow portion at 22, 24 extending continuously from the opening portion. There is an occupant restraint portion 23 at an opposite closed end of the airbag having a single continuous open space therein when inflated with the gas

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and extending continuously from the gas flow portion. The gas flow path portion comprises a narrow throated passageway between the opening portion and the occupant restraint portion (i.e., narrower than occupant restraint portion 23, as indefinitely recited) whereby the gas flow from the opening portion to the occupant restraint portion through the gas flow path portion. At least one flow constricting joint portion 20a, 20b (i.e., joined to the bag at 25) is disposed adjacent (near, next) to the opening portion, dividing the gas flow path portion into two or more paths through which the gas flows from the opening portion to the occupant restraint portion via the throated passageway of the gas flow path portion. The at least one joint portion is located only in the gas flow path portion, and as functionally recited the size of the at least one joint portion is selected as to achieve an “appropriate” flow rate of gas into the airbag based on the size of the airbag as indefinitely recited (i.e. appropriate to inflate the bag in time to be effective in the accident).

Sections 20a and 20b are a plurality of joint portions (claim 12) that reduce an opening area of the gas flow path portion (claims 13-14), dividing the gas flow path portion into multiple flow paths for flowing the gas from the opening portion to the occupant restraint portion through the gas flow path portion (claim 15).

***Claim Rejections - 35 USC § 103***

6. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

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7. Claims 6 and 8-9 as best understood are rejected under 35 U.S.C. 103(a) as being unpatentable over Shiota et al.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Shiota et al to include a plurality of penetrating portions such as cylindrical cloth 108 in order to reduce the volume necessary to fill the air bag (column 4, lines 22-33) using an obvious design variant (case law (St. Regis Paper Co. v. Bemis Co. Inc., 193 USPQ 8, 11 (7<sup>th</sup> Cir. 1977) holds that it is obvious to duplicate parts (i.e., use more than one cylindrical cloth) for multiplied effect (to require even less gas to inflate the bag)). The penetrating portions in the obvious design variant would reduce an opening area of the gas flow path portion as functionally recited.

8. Claims 5, 19-20 and 22 as best understood are rejected under 35 U.S.C. 103(a) as being unpatentable over Shiota et al in view of Igawa (US006572144B2, newly cited).

In Figure 8(A) and 8(B) Igawa teaches two sides of an air bag sewn together at d. It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Shiota et al to include exterior panels of the air bag sewn together as taught by Igawa in order to form a penetrating or joint portion in a simplified manner (i.e., reducing additional parts such as Shiota et al's cloth 108). Sewing uppermost and lower panels together instead of side panels would be an obvious matter of design choice, as case law has held that shifting of location of parts is not patentably distinguishing when the invention still functions like the prior art (see In re Japiske, 86 USPQ 70 (CCPA 1950)) (claim 5). The joint would reduce the inflatable volume of the bag as functionally recited in claims 19 and 22, and it would reduce area in the gas

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flow path portion in keeping with Shiota et al, the primary reference, where the cloth 108 reduces a gas flow area in the gas flow path portion (claim 20).

***Allowable Subject Matter***

9. Claims 21 and 23 would be allowable if rewritten to overcome the rejection(s) under 35 U.S.C. 112, 2nd paragraph, set forth in this Office action and to include all of the limitations of the base claim and any intervening claims.

***Conclusion***

10. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).


A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Eric D Culbreth whose telephone number is 703/308-0360. The examiner can normally be reached on Monday-Thursday, 9:30-7:00 alternate Fridays off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Paul Dickson can be reached on 703-308-2089. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Eric D Culbreth  
Primary Examiner  
Art Unit 3616



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